



Application 09/616,276

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

in re application of:

Applicants: Evan E. Dussia

Examiner: Vanel Frenel

Serial No.: 09/616,276

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Group Art: 3626

Attorney Docket: 065489-001

For: Computerized Method and System
for Obtaining Storing and Accessing
Medical Records

Board of Patent Appeals and Interferences
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

APPELLANT'S BRIEF UNDER 37 CFR 41.10

This brief is in furtherance of the Notice of Appeal filed in this application on July 16, 2004 and having a two month period for filing an Appeal Brief running from an April 12, 2005 mailing date of a Corrected Decision granting revival of the application. A Petition for an Extension of Time (2 months) along with the fee is enclosed.

The fee set forth in 37 CFR 41.20(b)(2) is paid concurrently with the filing of this brief in accordance with the accompanying Transmittal of Appeal Brief.

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1. REAL PARTY IN INTEREST - 37 CFR 41.37(c)(1)(i)

The real party in interest in this Appeal is the assignee of the present application, Medical Internet Synthesis, a corporation of the State of Florida.

2. RELATED APPEALS AND INTERFERENCES - 37 CFR 41.37(c)(1)(ii)

There is no other appeal, interference or judicial proceeding that is related to or that will directly affect, or that will be directly affected by, or that will have a bearing on the Board's decision in this Appeal.

3. STATUS OF CLAIMS - 37 CFR 41.37(c)(1)(iii)

Claims cancelled: 5.

Claims withdrawn but not cancelled: none.

Claims pending: 1-4 and 6-24.

Claims allowed: none.

Claims rejected: 1-4 and 6-24.

The claims on appeal are 1-4 and 6-24.

4. STATUS OF AMENDMENTS - 37 CFR 41.37(c)(1)(iv)

No amendment has been filed subsequent to the final rejection.

5. SUMMARY OF THE CLAIMED SUBJECT MATTER- 37 CFR 41.37(c)(1)(v)

The present invention is directed to a method and system that allows capture, storage, processing, communication, security, and, in particular, summarized presentation, or a "snapshot" of patient health information, such as diagnoses and prescriptions, corresponding to an encounter with a patient. By presenting a summarized presentation, users accessing the summarized patient health information, such as emergency room personnel, are able to quickly acquire desired patient information without having to perform exhaustive, time consuming searching. For

example, the system extracts drug data from a physician's notes and presents that data in a list for quick access.

Independent claim 1 is directed to a medical health record storage, retrieval, and information extraction system. The system includes an extraction module (FIG. 1, resident, for example, in server, numeral 14) configured for extracting a patient's diagnosis, treatment, and drug information from respective progress notes of a physician (Specification page 6, lines 19 thru 24). The system also includes a storage module (FIG. 1, numeral 16) configured to store the extracted diagnosis and treatment information in a logically connected database. (Specification page 7, lines 17 thru 25). The system further includes a server (FIG. 1, numeral 14) configured to allow web-enabled data sharing access to the stored database by authorized users using a remote or local web-enabled device (Specification page 7, lines 16 thru 25), thereby allowing users the ability to quickly acquire desired patient information, such as prescription information, for example, when later treating the patient in an emergency situation.

Independent claim 2 is directed to a method of managing respective health records of a plurality of patients. The method includes uploading a progress note (FIG. 2, numeral 52) of a respective patient wherein the progress note comprises data relative to an encounter between a respective physician and the respective patient. See Specification page 6, lines 24 thru 25, and page 9, line 20, thru page 10, line 10. The method further includes identifying on the progress note respective parameters, such as a diagnosis and/or prescription, selectable by the respective physician. See Specification page 10, lines 22 thru 29. The method also includes storing the progress note with the identified parameters in a database (FIG. 1, numeral 16) accessible to a plurality of authorized users (FIG. 1, numeral 18-22). See Specification page 6, lines 16 thru 25, and page 7, lines 21 thru 25. The method further includes populating the database with respective progress notes and respective identified parameters resulting from further encounters between the respective patient and any respective physician so as to create a historical set of progress notes with identified parameters for that respective patient wherein the set of historical progress notes are inter-connectable based on one or more logic operators. See Specification page 11, lines 12 thru 16. The

identified parameters allow users accessing the data to quickly acquire desired patient information corresponding to the identified parameters.

Independent claim 12 is directed to a computer readable medium encoded with computer code for managing respective health records of a plurality of patients. The program code causes a computer to execute a method including uploading a progress note (FIG. 2, numeral 52) of a respective patient wherein the progress note comprises data relative to an encounter between a respective physician and the respective patient. See Specification page 6, lines 24 thru 25, and page 9, line 20, thru page 10, line 10. The method further includes identifying on said progress note respective parameters selectable by the respective physician. See Specification page 10, lines 22 thru 29. The method also includes storing said progress note with said identified parameters in a database (FIG. 1, numeral 16) accessible to a plurality of authorized users (FIG. 1, numeral 18-22). See Specification page 6, lines 16 thru 25, and page 7, lines 21 thru 25. The method further includes populating the database with respective progress notes and respective identified parameters resulting from further encounters between the respective patient and any respective physician so as to create a historical set of progress notes with identified parameters for that respective patient wherein the set of historical progress notes are inter-connectable based on one or more logic operators. See Specification page 11, lines 12 thru 16.

Independent claim 21 is directed to a medical health record storage and retrieval system including means for extracting a patient's diagnosis and treatment information from respective progress notes of a physician. See Specification page 6, lines 19 thru 24. The system also includes means for storing the extracted diagnosis and treatment information in a logically connected database (FIG. 1, numeral 16). See Specification page 7, lines 17 thru 25. The system further includes means for allowing web-enabled data sharing access to the stored database of the extracted diagnosis and treatment information by authorized users using a remote or local web-enabled device. See Specification page 6, lines 16 thru 25, and page 7, lines 21 thru 25. The system also includes means for tracking users accessing the database, for billing the accessing users for each access of the database, and for allocating fees among entities

associated with the respective medical diagnosis and treatment information accessed by respective users. See Specification page 17, lines 5 thru 21.

6. GROUNDS OF REJECTION TO BE REVIEWED UPON APPEAL - 37 CFR 41.37(c)(1)(vi)

(A) Claims 1, 22, and 23 are rejected under 35 USC 103(a) as being unpatentable over Lavin et al., U.S. Pat. No. 5,772,585, ("Lavin") in view of Iliff, U.S. Pat. No. 6,206,829 ("Iliff").

(B) Claims 2-4, 6-8, 10-17, and 19-20 are rejected under 35 USC 103(a) as being unpatentable over Lavin in view of Evans, U.S. Pat. No. 6,347,329, ("Evans").

(C) Claims 9 and 18 are rejected under 35 USC 103(a) as being unpatentable over Lavin in view of Evans, and further in view of Walker et. al., U.S. Pat. No. 5,949,875("Walker").

(D) Claim 21 is rejected under 35 USC 103(a) as being unpatentable over Lavin and Iliff, in view of Walker.

7. ARGUMENT 37 CFR 41.37(c)(1)(vii)

(A) The appellants traverse the rejection of claims 1, 22, and 23 under 35 USC 103(a) as being unpatentable over Lavin et al., U.S. Pat. No. 5,772,585 ("Lavin"), in view of Iliff, U.S. Pat. No. 6,206,829 ("Iliff").

With respect to claims 1, 22, and 23, independent claim 1 is directed to a medical health record storage and retrieval system. Claims 22 and 23 depend directly or indirectly therefrom. In part, claim 1 recites "an extraction module...to extract a patient's medical diagnosis and treatment information from respective progress notes" and "a storage module to store the extracted diagnosis and treatment information."

The Lavin reference is relied on by the Examiner to teach a medical health record storage and retrieval system having an extraction module element and a storage module element as recited in claim 1. While the general description of the Lavin reference as set forth by the Examiner is believed to be accurate, Lavin merely refers to *recording* and *storing* progress note entries in predefined templates or fields during or after an examination by a health care provider. See, for example, Lavin, Column 9, lines 23-25. Nowhere does Lavin appear to teach or suggest *extracting* information from the progress notes. Accordingly, Lavin does not teach or suggest an “extraction module” that “extracts a patient’s medical diagnosis and treatment information from respective progress notes” as recited in claim 1.

Claim 1 also recites “a server configured to allow web-enabled data sharing to the stored database by authorized users using a remote or local web-enabled device.” The Examiner recognizes that Lavin lacks any teaching or suggestion of a server element as recited in claim 1. Consequently, the Examiner relies on Iliff as teaching a server element. Iliff describes a medical self-diagnosis system that includes a network access processor that executes, based on a patient’s input, predefined diagnostic scripts using a script engine. See for example, Iliff, column 4, lines 46-58. However, the cited feature of running diagnostic scripts utilizing a network is a different process than providing “web-enabled data sharing to the stored database” as recited in claim 1. Accordingly, Iliff teaches away from the suggested combination by teaching the feature of executing scripts via a network, instead of teaching the claimed feature of allowing “web-enabled data sharing to the stored database by authorized users using a remote or local web-enabled device.”

Furthermore, neither Lavin nor Iliff appear to contain any suggestion that their respective features can be combined as suggested by the Examiner. MPEP 2143.01 provides that the mere fact that references can be combined or modified in hindsight does not render that resultant combination obvious. Rather, the prior art must also suggest the desirability of the combination. See In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Lavin does not appear to suggest running diagnostic scripts for patients over a network, nor does Iliff suggest using diagnostic scripts in a system for

management of patient medical records. In no patents referred to by the Examiner nor in the ordinary knowledge of those skilled in the art is there any suggestion to combine the teachings of Lavin or Iliff to arrive at the present invention. Even assuming, for arguments' sake, that the references were combinable, the references would not meet claim 1. It would be necessary to make modifications, not taught in the prior art, in order to combine the references in the manner suggested to provide "web-enabled data sharing access" to the "extracted diagnosis and treatment information" stored in the database as recited in claim 1.

For all the above reasons, neither Lavin nor Iliff, alone or in combination, teaches or suggests the claimed invention. Thus, the rejection of claim 1, and claims 22 and 23 depending therefrom, is not supported by the art and should be withdrawn.

(B) The appellants traverse the rejection of claims 2-4, 6-8, 10-17, and 19-20 under 35 USC 103(a) as being unpatentable over Lavin in view of Evans, U.S. Pat. No. 6,347,329 ("Evans").

With respect to claims 2-4, 6-8, and 10-11, independent claim 2 is directed a method for managing respective health records of a plurality of patients. Claims 3-4, 6-8, and 10-11 depend directly or indirectly therefrom. With respect to claims 12-17 and 19-20, independent claim 12 is directed to a computer readable medium computer readable medium encoded with computer code for managing respective health records of a plurality of patients. Claims 13-17 and 19-20 depend directly or indirectly therefrom.

In part, claim 2 recites the elements of "uploading a progress note of a respective patient," "identifying on said progress note respective parameters selectable by the respective physician," and "storing said progress note with said identified parameters in a database accessible to a plurality of authorized users."

The Lavin reference is relied on by the Examiner to teach a method for managing health records including the features of uploading a progress note, identifying parameters on the progress note, and storing the progress notes with the identified parameters in database as recited in claim 2. However, Lavin merely refers to

recording progress notes during or after an examination by a health care provider. See, for example, Lavin, Column 9, lines 23-25. The mere act of recording progress notes is different from "identifying ...parameters" on progress notes and "storing said progress notes with said identified parameters." Therefore, Lavin fails to teach or suggest the these features recited in claim 2.

Claim 1 also recites "populating said database with respective progress notes resulting from further encounters between the respective patient and any respective physician so as to create a historical set of progress notes for that respective patient, the set of historical progress notes being interconnectable based on one or more logical operators." The Examiner recognizes that Lavin lacks any teaching or suggestion of populating a database as claimed in claim 2. Consequently, the Examiner relies on Evans as suggesting this feature, apparently by teaching a database that allows healthcare providers to access and update patient files electronically. However, the cited feature of Evans does not appear to suggest a "set of historical progress notes being interconnectable based on one or more logical operators" as recited in claim 2. Rather, Evans merely discloses a data structure with pointers for storing patient information based on a patient identifier. See, for example, Evans, Column 8, lines 35-65. The applicant submits that the data structure as disclosed in Evans is different from "set of historical progress notes being interconnectable based on one or more logic operators." Therefore, even if combined, the references would not meet claim 2, because the suggested combination of references fails to teach or suggest all the features recited on claim 2. Accordingly, it would be necessary to make modifications, not taught in the prior art, in order to combine the references to teach the recited features of claim 2.

Furthermore, neither Lavin nor Evans appear to contain any suggestion that their respective features can be combined as suggested in the Office action. Lavin does not suggest creating a set of historical progress notes being interconnectable based on one or more logical operators, nor does Evans suggest uploading progress notes, identifying parameters on progress notes, or storing progress notes.

For all the above reasons, neither Lavin nor Evans, alone or in combination, teaches or suggests the claimed invention. Thus, the rejection of claim 2, claims 3-4, 6-8, and 10-11 depending from claim 2, claim 12, and claims 13-17 and 19-20 depending from claim 12 is not supported by the art and should be withdrawn.

(C) Claims 9 and 18 are rejected under 35 USC 103(a) as being unpatentable over Lavin in view of Evans and further in view of Walker et. al., U.S. Pat. No. 5,949,875, ("Walker").

With respect to claims 9 and 18, claim 9 depends from independent claim 2, and is directed to a computerized method of managing health records of patients and includes tracking users accessing information and allocating fees among entities associated with the information. Claim 18 depends from independent claim 2, and is directed a computer readable medium computer readable medium encoded with computer code for managing health records of patients and includes tracking users accessing information and allocating fees among entities associated with the information.

Claim 9, is believed to be patentable based on the arguments presented above with regard to claim 2. In addition, claim 9 is believed to be patentable because the features of claim 9 are not suggested or taught by Lavin, Evans, and Walker, alone or in combination. Claim 9 recites a method of managing health records comprising "tracking users accessing information in the database to process respective billing of the accessing users for each access of the database, and allocating fees among entities associated with the respective information accessed by respective users."

The Examiner relies on Walker to teach the features of tracking and allocating fees for users of a database, apparently by teaching an access management computer controlling a user's access to digital data while causing a billing system to toll the user's access to the data. See for example, Walker, column 3, lines 5-23. However, nowhere does Walker appear to suggest or describe allocating fees among entities associated with the data itself. Furthermore, neither Lavin, Iliff, nor Walker appear to contain any suggestion that their respective features can be combined as suggested in the by the

Examiner. Even assuming, for arguments' sake, that the references were combinable, the references would not meet claim 9. It would be necessary to make modifications, not taught in the prior art, in order to combine the references in the manner suggested to provide the features recited in claim 9.

For all the above reasons, neither Lavin, Evans, nor Walker, alone or in combination, teaches or suggests the claimed invention. Thus, the rejection of claim 9 is not supported by the art and should be withdrawn.

Claim 18 is believed to be patentable based on the arguments presented above with regard to claim 12. In addition, the applicant submits that the combination of Lavin, Evans, and Walker, does not render amended claim 18 unpatentable for at least the same reasons given above with regard to the rejection of claim 9. Therefore, the rejection of claim 18 is not supported by the art and should be withdrawn.

(D) Claim 21 is rejected under 35 USC 103(a) as being unpatentable over Lavin, Iliff, and Walker.

Independent claim 21 recites, in part, a medical health record storage and retrieval system comprising a "means for extracting a patient's diagnosis and treatment information from respective progress notes" and a "means for storing the extracted diagnosis and treatment information in a logically connected database."

The Lavin reference is relied on by the Examiner as teaching these elements. While the general description of the Lavin reference as set forth by the Examiner is believed to be accurate, Lavin merely refers to *recording* and *storing* progress note entries in predefined templates or fields during or after an examination by a health care provider. See, for example, Lavin, Column 9, lines 23-25. Accordingly, Lavin fails to teach or suggest a "means for *extracting* a patient's diagnosis and treatment information" as recited in claim 1.

Claim 21 also recites a "means for allowing web-enabled data sharing access to the stored database by authorized users using a remote or local web-enabled device." The Examiner recognizes that Lavin lacks any teaching or suggestion of the means for

allowing web-enabled data sharing access as recited in claim 1. Consequently, the Examiner relies on Iliff as teaching the means for allowing web-enabled data sharing access of claim 1. Iliff describes a medical self-diagnosis system that includes a network access processor that executes, based on a patient's input, predefined diagnostic scripts using a script engine. See for example, Iliff, column 4, lines 46-58. However, the cited feature of running diagnostic scripts utilizing a network is a different process than providing "a means for allowing a web-enabled data sharing access to the stored database" as recited in claim 21. Accordingly, Iliff teaches away from the suggested combination by teaching the feature of executing scripts via a network, instead of teaching the claimed feature of allowing "web-enabled data sharing." Furthermore, neither Lavin nor Iliff appear to contain any suggestion that their respective features can be combined as suggested in the by the Examiner.

Claim 21 also recites "means for tracking users accessing the database, for billing the accessing users for each access of the database, and for allocating fees among entities associated with the respective medical diagnosis and treatment information accessed by respective users." The Examiner recognizes that the combination of Lavin and Iliff fails to teach this element. Consequently, the Examiner relies on Walker as suggesting this feature, apparently by teaching an access management computer controlling a user's access to digital data while causing a billing system to toll the user's access to the data. See for example, Walker, column 3, lines 5-23. However, nowhere does Walker appear to suggest or describe allocating fees among entities associated with the data itself. Thus, Walker fails to teach or suggest the claimed feature of "allocating fees among entities associated with the respective information."

Furthermore, neither Lavin, Iliff, nor Walker appear to contain any suggestion that their respective features can be combined as suggested in the by the Examiner. Even assuming, for arguments' sake, that the references were combinable, the references would not meet claim 21. It would be necessary to make modifications, not taught in the

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prior art, in order to combine the references in the manner suggested to provide the features recited in claim 21.

For all the above reasons, neither Lavin, Iliff, nor Walker, alone or in combination, teaches or suggests the claimed invention. Thus, the rejection of claim 21 is not supported by the cited art and should be withdrawn.

8. CLAIMS APPENDIX 37 CFR 41.37(c)(1)(viii)

A Claims Appendix containing a copy of the claims involved in this appeal is provided herewith.

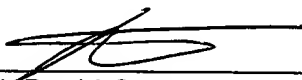
9. EVIDENCE APPENDIX 37 CFR 41.37(c)(1)(ix)

An empty Evidence Appendix is provided herewith.

10. RELATED PROCEEDINGS APPENDIX 37 CFR 41.37(c)(1)(x)

An empty Related Proceedings Appendix is provided herewith.

Respectfully submitted,



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APPENDIX OF CLAIMS ON APPEAL

1. A medical health record storage and retrieval system comprising:
 - an extraction module operable to extract a patient's diagnosis and treatment information from respective progress notes of a physician;
 - a storage module configured to store the extracted diagnosis and treatment information in a logically connected database; and
 - a server configured to allow web-enabled data sharing access to the stored database by authorized users using a remote or local web-enabled device.
2. A computerized method for managing respective health records of a plurality of patients, said method comprising:
 - uploading a progress note of a respective patient, said progress note comprising data relative to an encounter between a respective physician and the respective patient;
 - identifying on said progress note respective parameters selectable by the respective physician;
 - storing said progress note with said identified parameters in a database accessible to a plurality of authorized users; and
 - populating said database with respective progress notes and respective identified parameters resulting from further encounters between the respective patient and any respective physician so as to create a historical set of progress notes with identified parameters for that respective patient, the set of historical progress notes being interconnectable based on one or more logic operators.
3. The computerized method of claim 2, wherein the identified parameters are selected to convey a snapshot of said encounter.

4. The computerized method of claim 2, wherein the identified parameters are selected from the group consisting of diagnosis and prescription parameters.

6. The computerized method of claim 2, wherein one of the logical operators comprises a chronology-indicative operator.

7. The computerized method of claim 2, wherein one of the logical operators comprises a pathology-indicative operator.

8. The computerized method of claim 2, wherein one of the logical operators comprises a pharmacology-indicative operator.

9. The computerized method of claim 2 further comprising:
tracking users accessing information in the database to process respective billing of the accessing users for each access of the database, and
allocating fees among entities associated with the respective information accessed by respective users.

10. The computerized method of claim 2, wherein the database is accessible to a plurality of users through a communications network.

11. The computerized method of claim 10, wherein the communications network comprises the Internet.

12. A computer readable medium encoded with computer code for managing respective health records of a plurality of patients, the program code causing a computer to execute a method comprising:

uploading a progress note of a respective patient, said progress note comprising data relative to an encounter between a respective physician and the respective patient;

identifying on said progress note respective parameters selectable by the respective physician;

storing said progress note with said identified parameters in a database accessible to a plurality of authorized users; and

populating said database with respective progress notes and respective identified parameters resulting from further encounters between the respective patient and any respective physician so as to create a historical set of progress notes with identified parameters for that respective patient, the set of historical progress notes being interconnectable based on one or more logic operators.

13. The computer readable medium of claim 12, wherein the identified parameters are selected to convey a snapshot of said encounter.

14. The computer readable medium of claim 12, wherein the identified parameters are selected from the group consisting of diagnosis and prescription parameters.

15. The computer readable medium of claim 12, wherein one of the logical operators comprises a chronology-indicative operator.

16. The computer readable medium of claim 12, wherein one of the logical operators comprises a pathology-indicative operator.

17. The computer readable medium of claim 12, wherein one of the logical operators comprises a pharmacology-indicative operator.

18. The computer readable medium of claim 12, further comprising:
tracking users accessing information in the database to process respective billing of the accessing users for each access of the database, and

allocating fees among entities associated with the respective information accessed by respective users.

19. The computer readable medium of claim 12, wherein the database is accessible to a plurality of users through a communications network.

20. The computer readable medium of claim 19, wherein the communications network comprises the Internet.

21. A medical health record storage and retrieval system comprising:

means for extracting a patient's diagnosis and treatment information from respective progress notes of a physician;

means for storing the extracted diagnosis and treatment information in a logically connected database;

means for allowing web-enabled data sharing access to the stored database by authorized users using a remote or local web-enabled device; and

means for tracking users accessing the database, for billing the accessing users for each access of the database, and for allocating fees among entities associated with the respective medical diagnosis and treatment information accessed by respective users.

22. The system of claim 1, further comprising a processor module configured to track users accessing the database, to bill the accessing users for each access of the database, and to allocate fees among entities associated with the respective medical diagnosis and treatment information accessed by respective users.

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23. The system of claim 22, wherein the processor module is further configured to control access of the database according to authorship of information in the database.

24. The method of claim 2, further comprising controlling access of the database according to authorship of information in the database.

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EVIDENCE APPENDIX

None.

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RELATED PROCEEDINGS APPENDIX

None.